

## REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 7-18 and 39 have been canceled without prejudice. Claims 1-6, 19-38, and 40-43 are pending in this application.

### 35 U.S.C. § 101

Claims 1-6, 23-36, and 38-43 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

With respect to claims 1-6 and 43, claims 1-6 and 43 have been amended to replace “computer-readable media” with “computer-readable memories”. Personal computers, server computers, and general computing devices are discussed at pp. 4-5 of the Specification. General computing devices have one or more types of memory (e.g., RAM, ROM, disk, RAID storage, etc.), as discussed at p. 5, lines 10-12 of the Specification. It is well known that these types of memory store instructions to be executed by a processor. Accordingly, Applicant respectfully submits that claims 1-6 and 43 fall within a statutory category of invention as set forth in 35 U.S.C. §101.

With respect to claims 23-31, in the October 10, 2006 Examiner’s Answer it was asserted that claims 23-31 cover software alone. Applicant respectfully disagrees. The Specification at p. 66, lines 19-25 recites:

The discussions herein are directed primarily to software modules and components. Alternatively, the systems and processes described herein can be implemented in other manners, such as firmware or hardware, or combinations of software, firmware, and hardware. By way of example, one or more Application Specific Integrated Circuits (ASICs) or Programmable Logic Devices

(PLDs) could be configured to implement selected components or modules discussed herein.

Thus, Applicant respectfully submits that it would be clear to one of ordinary skill in the art that the systems and processes discussed in the Specification do not cover software alone. As claims 23-31 do not cover software alone, Applicant respectfully submits that claims 23-31 fall within a statutory category of invention as set forth in 35 U.S.C. §101.

With respect to claims 32-36, claims 32-36 have been amended to replace “method” with “computerized method”. As such, Applicant respectfully submits that claims 32-36 are not directed purely to an abstract idea. Accordingly, Applicant respectfully submits that claims 32-36 comply with 35 U.S.C. §101.

With respect to claims 38-42, claims 38 and 40-42 have been amended. Claim 38 has been amended to incorporate the language of claim 39, which has been canceled without prejudice. Applicant respectfully submits that claims 38 and 40-42 comply with 35 U.S.C. §101.

Applicant respectfully submits that amended claims 1-6, 23-36, 38, and 40-43, as amended, comply with 35 U.S.C. §101.

### **35 U.S.C. § 112**

Claims 38-42 stand rejected under 35 U.S.C. §112, second paragraph. As part of this response, claims 38 and 40-42 have been amended. Claim 38 has been amended to incorporate the language of claim 39, which has been canceled without prejudice. Applicant respectfully submits that claims 38 and 40-42, as amended, comply with 35 U.S.C. §112, second paragraph, and respectfully requests that the §112 rejections be withdrawn.

### **Objections to the Specification**

The specification stands objected to as failing to provide proper antecedent basis for claims 1-6 and 38-43. As discussed above, claims 1-6, 38, and 40-43 have been amended, and claim 39 has been canceled without prejudice. Applicant respectfully submits that proper antecedent basis is present for claims 1-6, 38, and 40-43, as amended, and respectfully requests that the objections to the Specification be withdrawn.

### **35 U.S.C. § 102**

Claims 1, 19, and 43 stand rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,292,827 to Raz (hereinafter "Raz"). Applicant respectfully submits that claims 1, 19, and 43 are not anticipated by Raz.

Raz is directed to information transfer systems and method with dynamic distribution of data, control and management of information (see, Title). Raz discusses a forms generator/processor that provides the ability to scan paper-based forms and convert them to HTML documents using OCR technology (see, col. 12, lines 37-40). Form blanks are automatically converted to fields that can be typed into (see, col. 12, lines 40-41). Validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45).

In contrast, amended claim 1 recites:

One or more computer-readable memories comprising computer-executable instructions that, when executed, direct a processor to perform acts comprising:

automatically identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field;

automatically identifying validation code that, when executed, validates that the input conforms to the one or more restrictions; and

adding, to a new form definition that includes a non-custom field corresponding to the custom field, the identified validation code.

Applicant respectfully submits that no such automatically identifying and adding is disclosed in Raz.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose automatically identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field, and automatically identifying validation code that, when executed, validates that the input conforms to the one or more restrictions as recited in amended claim 1.

For at least these reasons, Applicant respectfully submits that amended claim 1 is allowable over Raz.

With respect to amended claim 19, amended claim 19 recites:

A computerized method comprising:  
automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input; and  
automatically adding validation code to source code of the form, wherein the validation code is based at least in part on the one or more desired fields and one or more desired input restrictions associated with the one or more desired fields.

Applicant respectfully submits that no such method is disclosed in Raz.

Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input, and automatically adding validation code to source code of the form as recited in amended claim 19.

For at least these reasons, Applicant respectfully submits that amended claim 19 is allowable over Raz.

With respect to claim 43, claim 43 depends from amended claim 1, and Applicant respectfully submits that claim 43 is allowable over Raz at least because of its dependency on claim 43. For at least the reasons, Applicant respectfully submits that claim 1 is allowable over Raz.

Applicant respectfully requests that the §102 rejections be withdrawn.

### **35 U.S.C. § 103**

Claims 2-6, 20-24, and 26-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Laura Lemay's Workshop JavaScript (hereinafter "Lemay"). Claim 39 has been canceled without prejudice. Applicant respectfully submits that claims 2-6, 20-24, 26-38, and 40-42 are not obvious over Raz in view of Lemay.

Lemay is directed to validating form data with event handlers (see, p. 132). This validation of Lemay refers to checking each field to ensure that it contains a proper value and advising the user if it is incorrect (see, p. 132).

With respect to claims 2-6, claims 2-6 depend from amended claim 1, and Applicant respectfully submits that claims 2-6 are allowable over Raz at least because of their dependency on amended claim 1. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies of Raz discussed above with respect to amended claim 1. Although Lemay discusses validating form data with event handlers, nowhere in Lemay is there any discussion or mention of automatically identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field, and automatically identifying validation code that, when executed, validates that the input conforms to the one or more restrictions as recited in amended claim 1. For at least these reasons, Applicant respectfully submits that claims 2-6 are allowable over Raz in view of Lemay.

With respect to claims 20-22, claims 20-22 depend from amended claim 19, and Applicant respectfully submits that claims 20-22 are allowable over Raz at least because of their dependency on amended claim 19. Furthermore, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, the deficiencies of Raz discussed above with respect to amended claim 19. Although Lemay discusses validating form data with event handlers, nowhere in Lemay is there any discussion or mention of automatically identifying, from an input form definition written in a source code, one or more desired fields to be included on a form via which data can be input, and automatically adding validation code to source code of the form as recited in amended claim 19. For at least these reasons, Applicant respectfully submits that claims 20-22 are allowable over Raz in view of Lemay.

With respect to amended claim 23, amended claim 23 recites:

A system comprising:

a form analyzer configured to automatically identify one or more custom tags in a source code form definition; and

a tag replacement module, coupled to the form analyzer, configured to automatically replace each of the one or more custom tags with another tag, and further to add, to a form definition, for each of the one or more custom tags, validation code to validate subsequent inputs to a field corresponding to the tag.

Applicant respectfully submits that no such system is disclosed in Raz in view of Lemay.

In the October 10, 2006 Examiner's Answer at p. 14, Lemay is cited as disclosing the one or more custom tags in a source code form definition, and replace each of the one or more custom tags with another tag, and a field corresponding to the tag. As discussed above, however, Lemay discusses

validating form data with event handlers. Lemay also discusses HTML forms having validation (see, pp. 135-137). However, nowhere in Lemay is there any discussion or mention to automatically identify one or more custom tags in a source code form definition or to automatically replace each of the one or more custom tags with another tag. Without any such discussion or mention, Applicant respectfully submits that Lemay cannot disclose or suggest a system comprising a form analyzer configured to automatically identify one or more custom tags in a source code form definition and a tag replacement module configured to automatically replace each of the one or more custom tags with another tag as recited in amended claim 23.

With respect to Raz, Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose to automatically identify one or more custom tags in a source code form definition and to automatically replace each of the one or more custom tags with another tag as recited in amended claim 23.

For at least these reasons, Applicant respectfully submits that amended claim 23 is allowable over Raz in view of Lemay.



With respect to claims 24 and 26-31, claims 24 and 26-31 depend from amended claim 23, and Applicant respectfully submits that claims 24 and 26-31 are allowable over Raz in view of Lemay at least because of their dependency on amended claim 23. For at least these reasons, Applicant respectfully submits that claims 24 and 26-31 are allowable over Raz in view of Lemay.

With respect to amended claim 32, amended claim 32 recites:

A computerized method comprising:  
receiving a form definition including one or more custom tags, wherein each custom tag corresponds to a data input, and wherein each custom tag includes one or more associated input restrictions; and  
for each of the one or more custom tags,  
    automatically identifying a replacement non-custom tag,  
    automatically adding the identified replacement non-custom tag to a new form definition,  
    automatically identifying validation code that, when executed based on an input corresponding to the tag, validates whether the associated input restrictions are satisfied, and  
    automatically adding the identified validation code to the new form definition.

Applicant respectfully submits that no such method is disclosed in Raz in view of Lemay.

With respect to Raz, Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention,

Applicant respectfully submits that Raz cannot disclose automatically identifying validation code and automatically adding the identified validation code to the new form definition as recited in amended claim 32.

With respect to Lemay, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

Furthermore, as discussed above, Lemay discusses validating form data with event handlers. Lemay also discusses HTML forms having validation (see, pp. 135-137). However, nowhere in Lemay is there any discussion or mention of automatically identifying a replacement non-custom tag and automatically adding the identified replacement non-custom tag to a new form definition as recited in amended claim 32. Additionally, Raz is not cited as curing, and does not cure, these deficiencies of Lemay.

For at least these reasons, Applicant respectfully submits that amended claim 32 is allowable over Raz in view of Lemay.

With respect to claims 33-37, claims 33-37 depend from amended claim 32, and Applicant respectfully submits that claims 33-37 are allowable over Raz in view of Lemay at least because of their dependency on amended claim 32. For at least these reasons, Applicant respectfully submits that claims 33-37 are allowable over Raz in view of Lemay.

With respect to amended claim 38, amended claim 38 recites:

One or more computer-readable memories having stored thereon a text markup language document usable by a processor, the text markup language document comprising:

- a first portion identifying an input field for a form; and
- a second portion identifying one or more restrictions on inputs to the input field, and further identifying validation code to be

automatically added to a page to enforce the one or more restrictions on inputs to the input field.

Applicant respectfully submits that Raz in view of Lemay does not disclose or suggest one or more computer-readable memories as recited in amended claim 38.

In the October 10, 2006 Examiner's Answer at p. 21, Raz at col. 12, lines 36-49 is cited as teaching the first and second portions of claim 38. Raz discusses scanning paper-based forms and converting them to HTML documents using OCR technology (see, col. 12, lines 37-49). Raz also mentions that validation functions can be added to each field to do basic data checking and validation at the client (see, col. 12, lines 44-45). Raz simply mentions that validation functions can be added to each field, but does not provide any discussion or mention of how they are added or of how it is known what validation code is to be added. Without any such discussion or mention, Applicant respectfully submits that Raz cannot disclose a second portion identifying validation code to be automatically added to a page to enforce the one or more restrictions on inputs to the input field as recited in amended claim 38.

With respect to Lemay, the validating of form data with event handlers of Lemay is not cited as curing, and does not cure, these deficiencies of Raz.

For at least these reasons, Applicant respectfully submits that amended claim 38 is allowable over Raz in view of Lemay.

With respect to claims 40-42, claims 40-42 depend from amended claim 38, and Applicant respectfully submits that claims 40-42 are allowable over Raz in view of Lemay at least because of their dependency on amended claim 38. For

at least these reasons, Applicant respectfully submits that claims 40-42 are allowable over Raz in view of Lemay.

Claim 25 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Raz in view of Lemay and further in view of U.S. Patent No. 6,832,369 to Kryka (hereinafter "Kryka"). Applicant respectfully submits that claim 25 is not obvious over Raz in view of Lemay and Kryka.

Kryka is directed to the initialization of static data in object oriented systems (see, Title). In Kryka, a compiler for object-oriented programming code in a language which employs run-time static initialization semantics (such as the JAVA language) analyzes the static initialization code to find a subset of initialization statements which must execute under all conditions, creates an image of the static storage in which the variables initialized by statements in the subset are pre-initialized at compile time, and removes statements in the subset from the final compiled code of machine level instructions (see, col. 2, lines 44-53).

Claim 25 depends from amended claim 23 and Applicant respectfully submits that claim 25 is allowable over Raz in view of Lemay at least because of its dependency on amended claim 23. Furthermore, the initialization of static data in object oriented systems of Kryka is not cited as curing, and does not cure, the deficiencies of Raz in view of Lemay discussed above with respect to amended claim 23. For at least these reasons, Applicant respectfully submits that claim 25 is allowable over Raz in view of Lemay and Kryka.

Applicant respectfully requests that the §103 rejections be withdrawn.

**Conclusion**

Claims 1-6, 19-38, and 40-43 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

Date: 12/11/06

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